

# ***Opportunities for Change***

## **Implementing the Strategic Master Plan for Higher Education**

**Presented by Ann Daley and Bill Grinstein  
to the Senate Higher Education Committee**

December 4, 2008

## Strategic Master Plan Summary

### Central Goal

The central goal of the Strategic Master Plan is to raise the educational attainment of our citizens to benefit the state's economic position and its health.

### Central Purpose

The central purpose of the Strategic Master Plan is to provide long-term guidance for near term decisions.



*The Washington Legislature passed a concurrent resolution endorsing the Strategic Master Plan in its 2008 session.*

## **Higher education will play a key role in shaping our state's future**

- a) Building a stronger society**
- b) Speeding and strengthening economic recovery**
- c) Meeting current and future workforce needs**
- d) Ensuring global competitiveness**
- e) Fostering a climate of innovation and creativity**

## **Economic benefits accrue from higher levels of education**

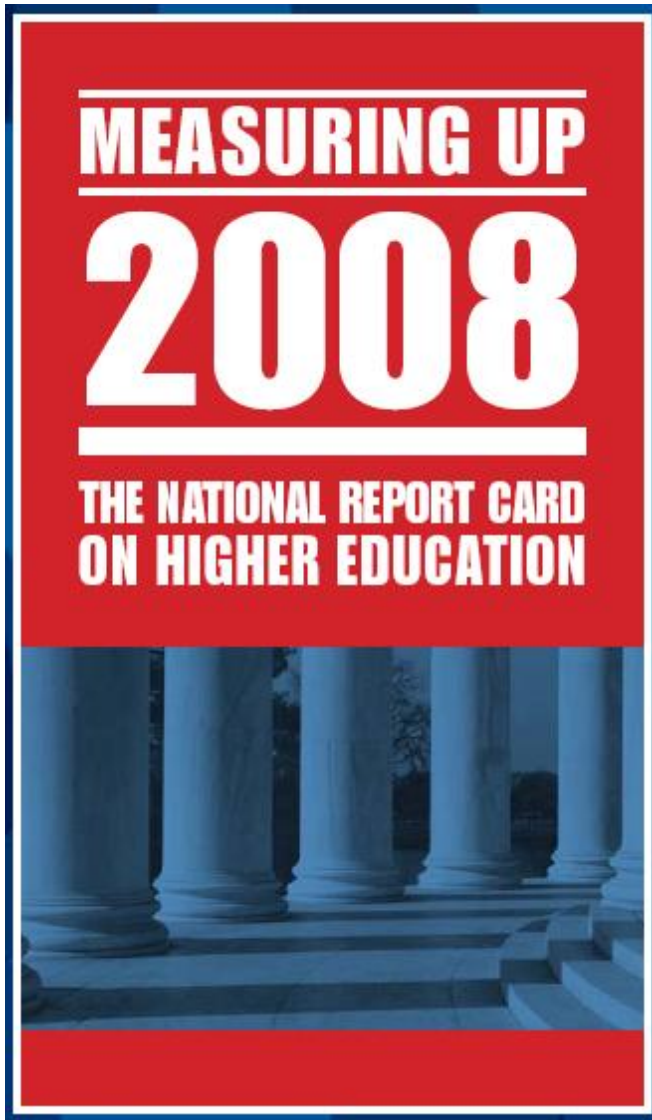
- a) Job creation**
- b) More robust tax base**
- c) Stronger export base**
- d) New investment in Washington from out of state and abroad**
- e) Higher earnings**
- f) Vibrant economic effects flowing from all of these**

## **Economic benefits accrue from higher levels of education**

- a) In 2006, median earnings of workers with an associate degree were 28 percent higher than those with only a high school diploma.**
- b) Workers with a BA or higher earned 80 percent more than high school graduates.**
- c) The Prosperity Partnership has demonstrated that when there are greater numbers of workers with BA degrees, the earnings of all workers increase.**

Source: HECB Economic Needs Assessment Report 2008

## *Opportunities for change*



*"If all racial and ethnic groups in Washington had the same educational attainment and earnings as whites, total annual personal income in the state would increase \$7 billion."*

**Measuring Up 2008**

## **Societal, personal benefits accrue from higher levels of education**

- **Average annual earnings increase**
- **Likelihood of unemployment decreases**
- **Likelihood of living at or below federal poverty level significantly decreases**
- **Vacation, health, retirement benefits increase**
- **Likelihood of being in very good health increases**

## Societal, personal benefits accrue from higher levels of education

### Single Parent With Children – No Degree

Median Income:	\$24,000
Average # of Children:	2
Prior Food Stamp Use:	38.6%
Food Stamp Use:	1 year
Living within federal poverty guidelines:	66.3%

### Single Parent With Children – Degree

Median Income:	\$45,000
Average # of Children:	1
Prior Food Stamp Use:	24.5%
Food Stamp Use:	1 year
Living within federal poverty guidelines:	32.8%

**2008 Washington State Population Survey Data. Data does not reflect actual family situations but is an average of the participants of the survey.**



## Societal, personal benefits accrue from higher levels of education

### Family With 1-2 Children – High School

Median Income:	\$61,500
Average # of Children:	1-2
Prior Food Stamp Use:	13.7%
Using federal welfare:	4.4%
Living within federal poverty guidelines:	21.2%

### Family With 1-2 Children – Degree

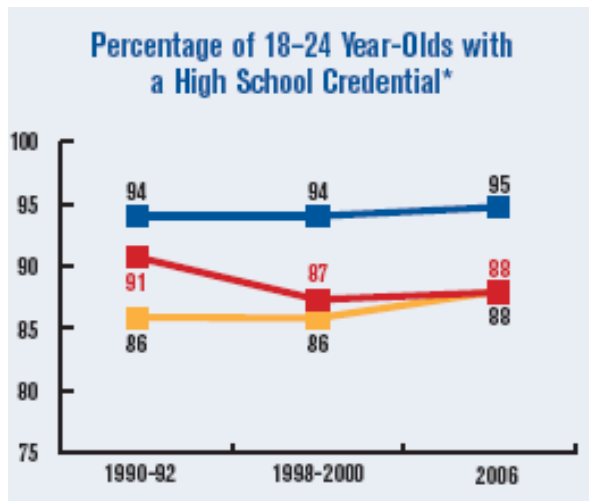
Median Income:	\$101,645
Average # of Children:	2
Prior Food Stamp Use:	5%
Using federal welfare:	0%
Living within federal poverty guidelines:	6.3%

**2008 Washington State Population Survey Data. Data does not reflect actual family situations but is an average of the participants of the survey.**

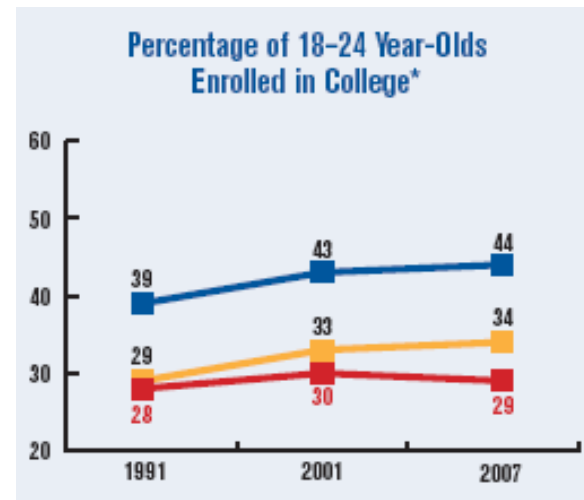
## **We face many challenges**

- **Baby boomer retirements**
- **Poor high school completion rates**
- **Lack of adequate preparation**
- **Low participation/success rates among rapidly growing racial/ethnic groups**
- **Low numbers of 25-49-year-olds enrolled in college**
- **Over-reliance on importing degreed workers**

## Opportunities for change

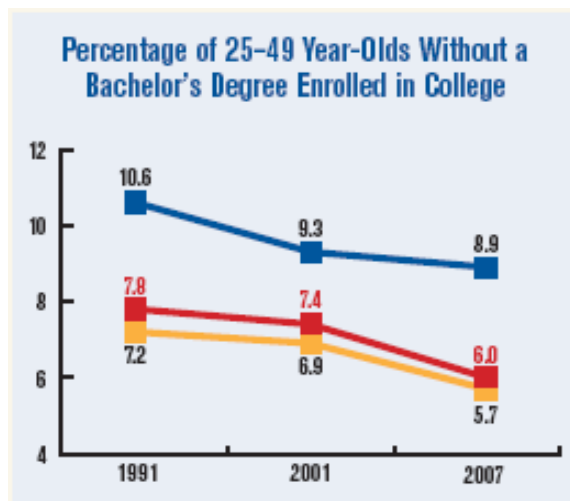


**Washington  
is failing to  
educate  
its younger  
population and its  
adult working-age  
population**



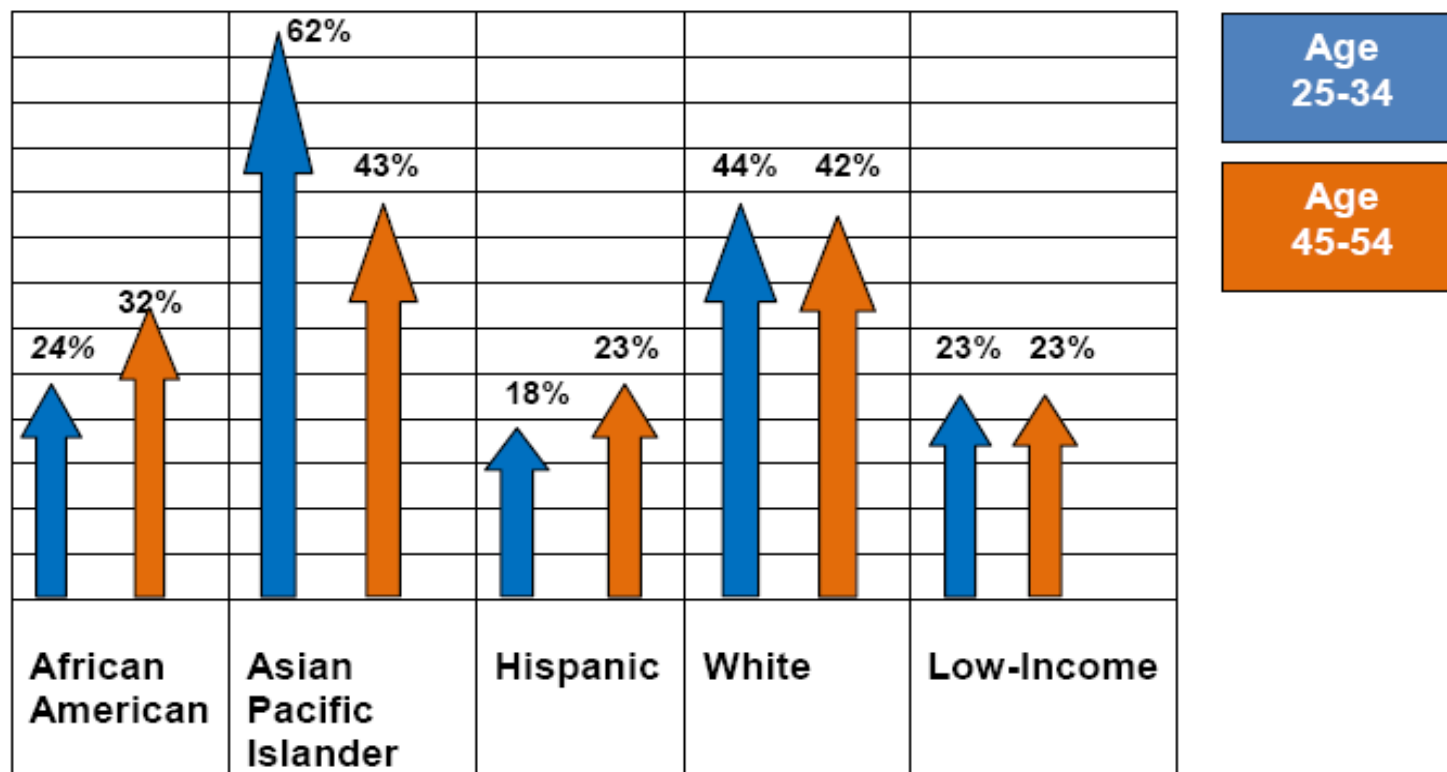
### Measuring Up 2008

—■— & ■ = Washington  
—■— & ■ = United States  
—■— & ■ = Median of Top Five States



## Some groups are falling behind their parents' education levels

Postsecondary Attainment by Age Group & Race/Ethnicity  
Percent Holding Associate Degree or Higher

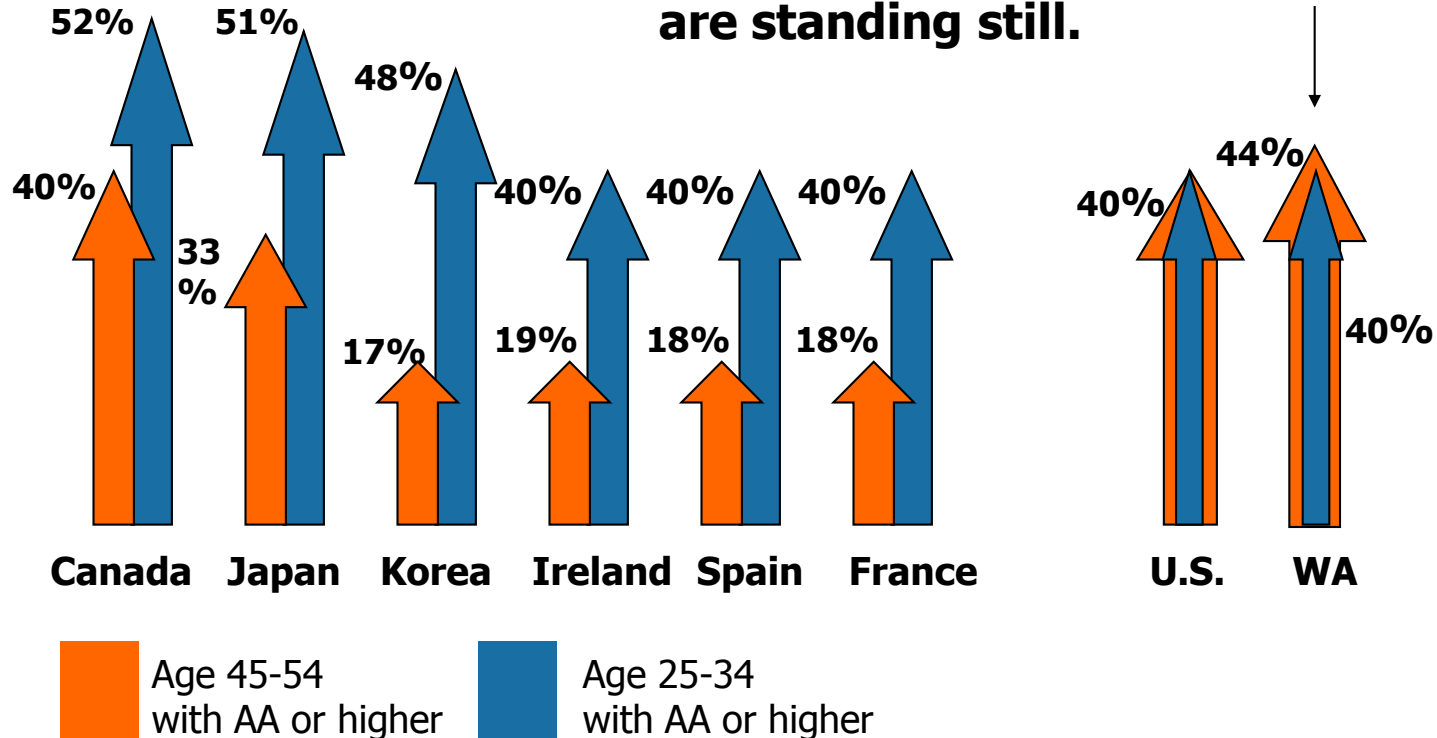


*The disparity in educational levels from the baby boomer generation to younger adults is steeper for some under-represented groups than the four percent average for the state as a whole.*

## *Opportunities for change*

**Other nations with advanced economies know  
educating the next generation is essential to future  
economic success...**

**...but the U.S. and Washington  
are standing still.**



## The Strategic Master Plan recommended

- **Increasing degree and certificate attainment by more than 40 percent annually by 2018.**
- **Promoting economic growth and innovation by focusing on the skills and knowledge needed for prosperity in the 21<sup>st</sup> century.**
- **Emphasizing accountability for results throughout the higher education system.**

## **The Legislature then asked the HECB to determine**

- **How the plan's degree goals would align with state workforce needs in the next decade.**
- **How the higher education system would match system and program capacity with changing state workforce needs.**
- **How much the plan would cost to implement.**
- **What the higher education system would do to increase access, enrollment and student success.**

## **The 10-year Implementation Plan**

**The Implementation Plan finds that a new paradigm will be needed to gain the social and economic benefits of increased higher education attainment levels among the state's citizens.**



### Three Work Groups Addressed the Challenge of Increasing the Level of Degree Attainment

#### **Economic Needs Assessment Work Group**

**Assemble pertinent existing state economic research.**

**Revisit assumptions of previous research on areas of future job growth & degree needs.**

**Develop more precise estimates of the cost/benefit of funding additional enrollment.**

#### **Policy & Demographic Analysis Work Group**

**Identify target populations.  
Analyze participation patterns.**

**Identify barriers.**

**Establish participation goals and strategies.**

**Prepare draft legislative concept agenda.**

#### **Institutional Capacity & Growth Estimates**

**Determine existing and near-term enrollment, space and technology capacity.**

**Combine institutional projections into state-level, 10-year projection.**

**Develop operating & capital cost estimates.**

## The three study groups arrived at the same set of observations

- A significant **change in state demographics** will require successful efforts to increase enrollment demand and therefore increase attainment levels.
- The old paradigm of **expanding for demand** needs to be changed. Under this old paradigm, the central concern was the **gap** between physical capacity and enrollment demand.

## Expanding On Demand

- There is a need for a new principle to guide the development of the state's higher education system.
- This new principle is ***Expanding On Demand***.
- ***Expanding On Demand*** would employ both traditional and alternative delivery methods to target investments in system capacity on the basis of actual increases in demand as opposed to projections of future demand.
- This new principle recognizes that the “**gap**” in higher education may no longer be as much about having adequate space as it is about **building future enrollments**.

## Expanding On Demand

- We also know we need to rethink the **configuration** of the **structure** and **respective roles and missions** of the higher education institutions.
- The HECB has directed HECB staff to work with the SBCTC, COP, and ICW to undertake this study. We hope to have finding available a year from now.

### **Key Priorities for the Implementation Plan**

- 1. *Preserve the progress we have made*** by sustaining current levels of support for higher education.
- 2. *Build a larger 'pipeline' to postsecondary education that captures more students graduating from our K-12 schools and more working adults.***
- 3. *Expand on demand*** by targeting growth and tailoring institutional plans to respond to specific demographic, regional and workforce needs.
- 4. *Redesign the delivery system for higher education*** by creating a new process for deciding where to build new campuses, expand programs, or change college and university missions.

## Enrollment and Capacity Analysis Study

**The purpose of this study, performed by MGT of America, Inc., was to estimate the capacity of institutional space and the effect of technology on enrollment and space needs.**

## Enrollment and Capacity Analysis Study

### Major Objectives

- Identify the existing **physical and programmatic capacity** of each institution, branch campus, education center including factors that might affect institutional capacity.
- Identify all **degree and enrollment plans** by level.
- Identify the **impact of technology** on accommodating future enrollments.
- Determine the **capital and operating costs** associated with future enrollments.
- Identify **conclusions and policy implications** regarding institutional capacity and degree and enrollment plans.

## Enrollment and Capacity Analysis Study

### Findings / Recommendations

#### Enrollment

Overall potential enrollment growth estimated by all sectors of higher education in Washington: **46,898 by 2018.\***

Strategic Master Plan Goal: **61,500 FTEs.**

- Baccalaureate/research: **23,723.**
- Community and technical college system: **20,093.**
- Independent Colleges: **3,082.**

**\*Assumes full operations and capital funding for five biennia.**



# Enrollment and Capacity Analysis Study

## Findings / Recommendations

### Degrees

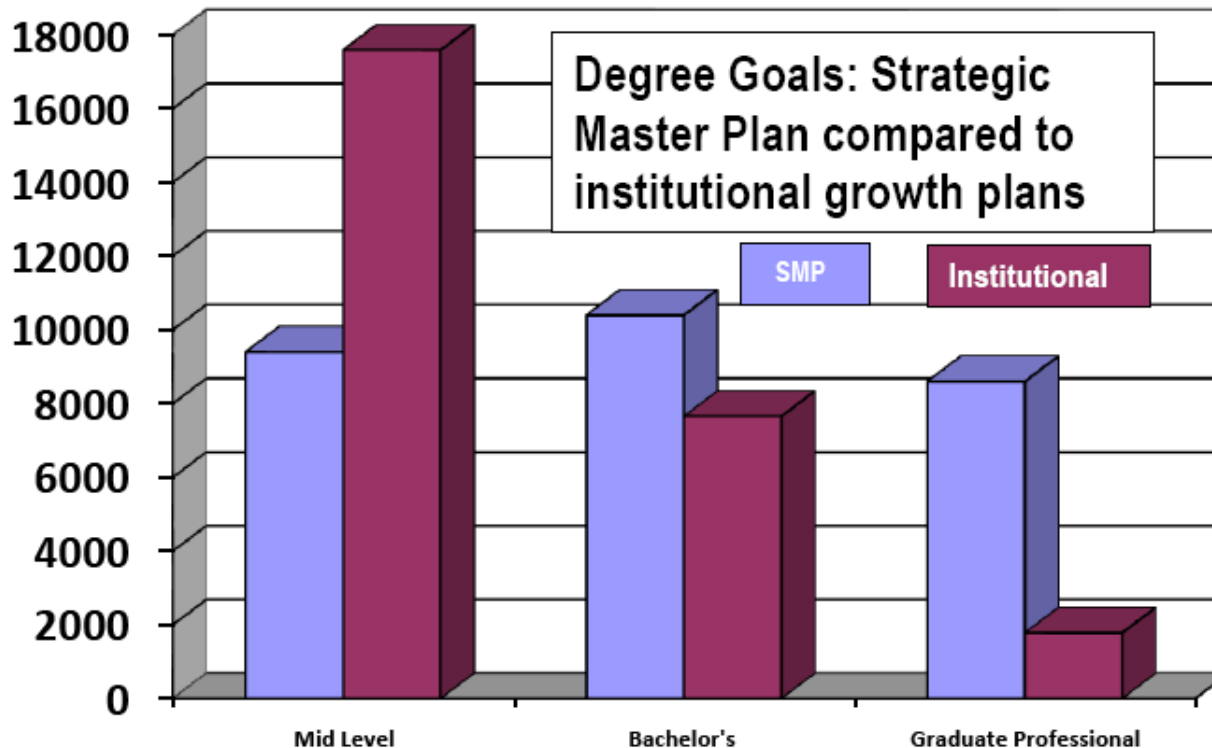
**Institutional Growth Plans:** 25,600 degrees annually by 2018\*

**Master Plan Goal:** 31,800 degrees annually by 2018.

- Mid-level degrees, certificates: **9,400**
- Bachelor's degrees: **13,800**
- Advanced degrees: **8,600**

\* Assumes full operations and capital funding for five biennia

## Enrollment and Capacity Analysis Study



**Community, technical college degree estimates exceed Master Plan goals.**

**Bachelor's and advanced degree estimates fall short of Master Plan goals.**

## Enrollment and Capacity Analysis Study

### Findings / Recommendations

#### Capital Needs

It is a higher priority to **preserve existing facilities** for both the two- and four-year institutions than to create new enrollment capacity.

However, **additional growth** will be needed in the community and technical college sector to accommodate existing space deficiencies, and **limited growth** should be planned in the four-year sectors, primarily the expansion of the branch campuses.

## Enrollment and Capacity Analysis Study

### Findings / Recommendations

#### eLearning Growth

**Online instruction** will be provided primarily by the community and technical colleges and by WSU, CWU, and EWU. With the exception of limited, self-supporting programs at the UW, no other public four-year institution plans to mount extensive eLearning programs.

However, **all institutions** will use technology to augment in-class instruction. Enrollment accommodated solely through online instruction could be nearly an additional **25,500 FTE by 2019**.

#### Recommendation

The HECB should ensure that the planning and coordination for online instruction occurs in all higher education sectors and levels.

## Enrollment and Capacity Analysis Study

### Findings / Recommendations

#### Operating and Capital Costs

- The operating cost associated with the institutions' enrollment plans is **\$634.4 million** (current dollars) over five biennia.
- The costs for the first two biennia are an estimated **\$101.6 million** and **\$95.5 million**.
- Shifting the 2009-2011 enrollment increases to the next biennium would increase costs by 5.6 percent per biennium, or a total five biennia cost increase of **\$35.5 million**.
- The capital costs in the institutions' capital plans for the next four biennia are an estimated **\$4.8 billion**. Sixty five percent is associated with preservation projects, and 35 percent is new construction.

# **Washington's Strategic Master Plan for Higher Education 2008-2018**

## **Policy and Demographic Analysis Study Group**

December 4, 2008

Senate Higher Education Committee

Jane Sherman, Washington State University  
Study Group Co-chair

## **Study group's responsibilities:**

- Examine state's demographic and postsecondary participation trends to identify target populations
- Identify state policy initiatives to increase access and success of target populations

## The study group ...

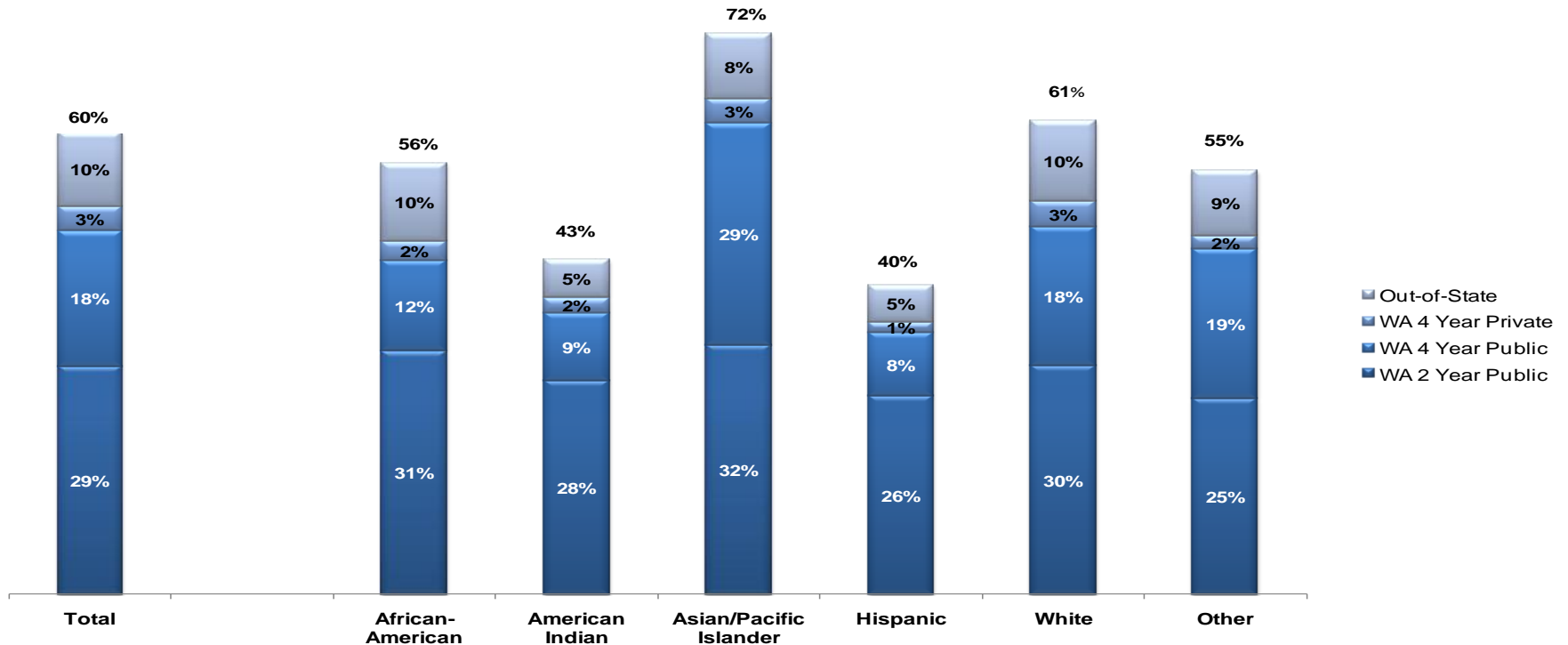
- Reviewed demographic and participation data and identified target populations.
- Reviewed literature on effective practices; state financial aid resources; e-learning and technology.
- Discussed possible strategies for increasing access and success.
- Developed recommendations.



## Target populations

*K-12 students of color and from low-income families*

**Direct-to-college enrollment rates for African American, American Indian, Hispanic students are lower than the state average: 2006 graduates**



# Target populations

## *Working-age (18-34) adults*

**There is a large number of working-age adults with less than a college degree: Washington adults ages 18-34, 2006**

Not in School

Education Level	In school	Employed	Unemployed		Not in Labor Force	Total
No high school diploma	53,710	104,720	15,130	(6.8%)	49,850	223,420
High school diploma	60,420	261,190	33,320	(8.0%)	61,720	416,650
College, no degree	177,740	190,610	13,620	(3.3%)	34,640	416,610
College degree	96,610	302,950	10,380	(2.3%)	39,810	449,740
Total	388,480	859,470	72,450	(4.8%)	186,020	1,506,420

Notes: Estimates are rounded to the nearest ten.

Source: 2006 American Community Survey.

## Policy considerations:

- Are there gaps in service around the state?
- Is it scalable?
- Is there evidence of effectiveness?
- What is the state's role?

## **Recommendations for strategies – three stages:**

1. Support effective current efforts.
2. Support strategic new initiatives that build on current efforts.
3. Build agenda for future initiatives.

## Four goals of our recommendations

1. Create a college-going culture for all families.
2. Build the K-12 pipeline to college.
3. Build the re-entry pipeline to college for adult workers.
4. Improve persistence and completion rates.

## Create a college going culture for all families

### ***New Initiative: Market "College"***

- ◆ Overarching, sustained, statewide marketing campaign to build a college-going culture for all families.
- ◆ Market research on effective messages and deployment for target populations.

## **Building a K-12 Pipeline**

*Support effective, current, statewide efforts*

- GEAR UP (early outreach and intervention)
- College Bound Scholarship (early promise)
- Dual credit (transition to college)
- Navigation 101 (K-12 counseling & advising)
- Building Bridges (K-12 dropout prevention and intervention)

## Building a K-12 Pipeline

### *New Initiative:*

#### *Integrated College Access Network (I-CAN)*

- ◆ Outreach to K. families via the GET program
- ◆ Aggressive marketing of College Bound Scholarship
- ◆ Trained college students as mentors for grades 5-12 students throughout the state
- ◆ Coursework on college-going culture for prospective teachers and school counselors
- ◆ Financial aid for dual credit coursework



## Building a K-12 Pipeline

### *Agenda for future work*

- More research to identify gaps in services that help under-represented groups of students.
- Improve data tracking/evaluation capabilities, with the possibility of a unique student P-20 student identifier for better measurement of student and system progress.
- Future expansion of dual credit programs that encourage students of color and students from low-income families to enroll in college.

## **Building a Reentry Pipeline**

*Support effective, current, statewide efforts*

- Opportunity Grants (workforce development, financial aid, support services)
- Bachelor of Applied Science (increase degree production opportunities)
- Integrated Basic Education and Skills Training (I-BEST) programs (ABE/ESL with workforce training courses)

## Building a Reentry Pipeline

### *New Initiative: Try College*

- ◆ Develop free, online college and career planning course
- ◆ Provide course through Washington Online, pooling enrollments to provide year-round start dates
- ◆ Course completers eligible for a tuition-free, credit-bearing course either online or on a college campus

## **Building a Reentry Pipeline**

### *Agenda for future work*

- Promote strategies to re-engage adults with some college credit but no degree
- Identify strategies to re-engage academic associate degree holders who did not transfer to baccalaureate degree program
- Develop a statewide system for awarding college credit for prior learning
- Promote strategies to reengage adults who lack job skills and academic skills to succeed in college

## **Improve Persistence and Completion**

*Support effective, current, statewide efforts*

- State Need Grant (financial assistance)
- Student persistence funding (support services)
- I-BEST (ESL/ABE + college credit courses)
- Transition Math Project (college readiness in math, STEM preparation)

# Improving Persistence and Completion

*New Initiative: Expand State Work Study Program*

- ◆ Provides both financial assistance and experiential learning
- ◆ Dedicate new funds to work in high demand fields including science, technology, engineering and math (STEM) fields and to mentor K-12 students

# Improve Persistence and Completion

## *Agenda for future work*

- Identify successful institutional initiatives for statewide expansion to encourage enrollment into STEM and other high demand fields and to improve retention and completion.
- Explore funding incentives, such as premium funding and the Student Achievement Initiative.
- Convene a task force to address technology and e-learning in relation to increasing capacity, access, and success. Consider SBCTC's Strategic Technology Plan as a model.

**Report of the HECB**  
***Economic Needs Assessment***  
***Work Team***

Senate Higher Education Committee

December 4, 2008  
Work Session



## Work Team Purpose

Develop a report that will:

- a. Make clear why our most critical economic challenge is meeting the skill requirements for a world-class innovative economy.
- b. Advise HECB on a methodology for analyzing the economic need to increase degree and certificate production in the state. Validate or modify degree production targets stated in the SMP, if possible.
- c. Identify high demand occupations and skills, and near-term strategies for increasing the supply of skilled workers.
- d. Identify strategies for improving analysis of skill gaps, updating this information, documenting system outputs, and progress closing skill gaps.
- e. Make policy recommendations for meeting employer demand for skilled workers.

# Stakeholder Representation

## Work team membership:

### **Name**

Alan Ralston  
Bill Zumeta  
Bob Drewel  
Chris Strow  
David Harrison  
Donald Patrick Jones  
Donna Steward  
Egils Milbergs  
Elaine Davis  
Irv Lefberg  
Jack Faris  
Jim Crabbe  
John Gardner  
Larry Ehl  
Livia Lam  
Ken Myer  
Lee Huntsman, Co-Chair  
Madeleine Thompson  
Paul Sommers  
Steve Van Ausdle, Co-Chair  
Susannah Malarkey  
Terry Byington

### **Affiliation**

Washington Research Council  
University of Washington  
Puget Sound Regional Council  
Puget Sound Regional Council  
Workforce Training and Education Coordinating Board  
Eastern Washington University  
Association of Washington Business  
Washington Economic Development Comm.  
State Board for Community & Technical Colleges  
Office of Financial Management  
Washington Biotechnology and Biomedical Association  
State Board for Community & Technical Colleges  
Washington State University  
Partnership for Learning  
SEIU 775  
Washington Technology Industry Association  
UW/Life Sciences Discovery Fund  
Workforce Training and Education Coordinating Board  
Seattle University  
Walla Walla Community College  
Technology Alliance  
American Electronics Association

# Major Findings

- Washington's higher education institutions make a vital contribution to our state's economic success. However, we have increasingly relied on attracting specialized talent from outside the state. Washington must instead produce enough of its own skilled workers to meet its economic needs.
- Washington must do a better job measuring workforce supply-demand gaps by improving its forecasting and analytical capacity, especially for those occupations with the greatest potential impact on Washington's economic prosperity.
- Employer demand for 2018 is expected to be so much higher than current degree production that it warrants ***immediate steps to increase degree- and certificate-production capacity at all three higher education levels (mid-level, baccalaureate, and graduate/professional).***
- The state's investment in high-demand programs of study must be sustained and enhanced, and the pipeline of interested and prepared students must be expanded.

## Washington's economic future

- Washington's economy has gone through structural changes.
- We have developed a well-educated and technically-skilled workforce relying, in part, on our ability to draw specialized talent to the state.
- Going forward, we need to sustain our innovation capacity.
- The biggest challenge is talent:
  - a. Baby boom generation is retiring and the next generation has lower levels of education attainment
  - b. Inadequate supply of prepared Washingtonians
  - c. Washington firms that look elsewhere for talent will have trouble finding it
  - d. The shortage of advanced and middle skilled workers is likely to grow

## Degree production targets

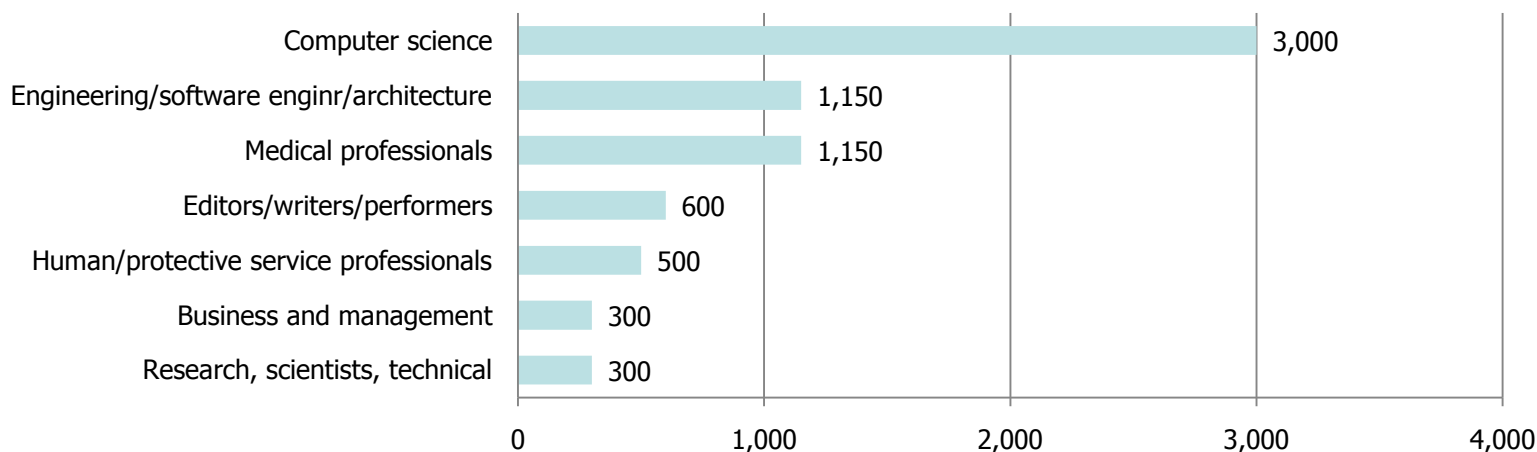
- Ten-year system goals should be developed based on a combination of externally-benchmarked inspirational goals and the best available economic analysis.
- The economic analysis undertaken for the work group indicates:
  - We are very far from where we need to be by 2018 to meet projected future demand, at all three levels.
  - Forecasted 2018 demand at the mid-level and graduate/professional level are close to the Strategic Master Plan degree production targets and should not be changed.
  - The HECB should consider lowering the 2018 baccalaureate degree production target from 42,400 to approximately 39,000, a level still 36 percent higher than current degree production levels.

## High Demand Occupations - Baccalaureate and above

High demand occupations are:

- STEM Occupations
- Health Sciences

**Supply/Demand Gap for Long Training Level Occupations**  
The difference between 2006-07 Supply and 2011-16 Average Annual Openings



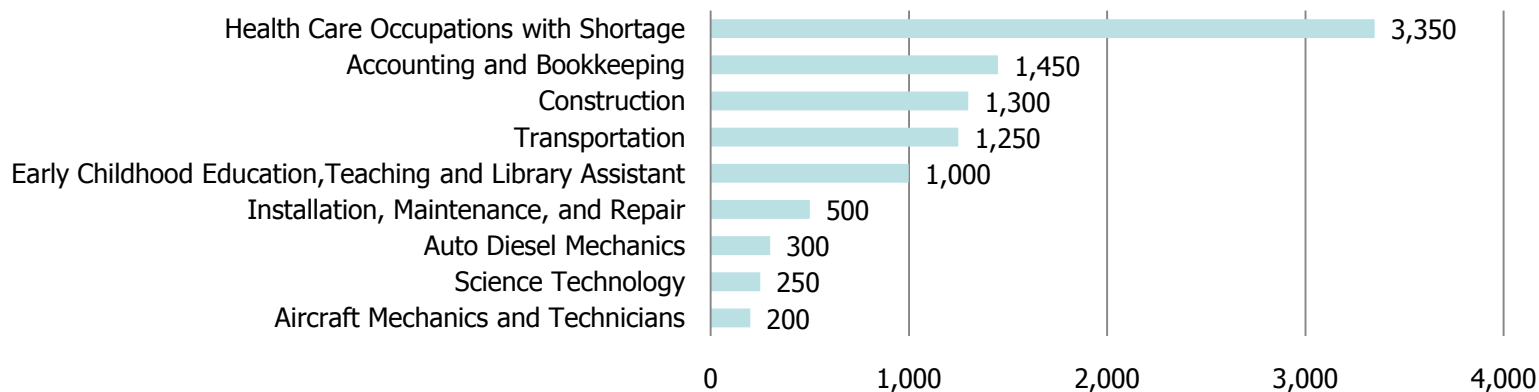
## High Demand Occupations Mid-Level

High demand occupations are:

- Construction
- Auto mechanics
- Transportation
- Installation/maintenance/repair
- Health care
- Early childhood education
- Accounting tech/bookkeeping
- Aircraft mechanics
- Science technology
- STEM transfer

### Supply/Demand Gap for Mid-Level Occupations

The difference between 2005-06 Supply and 2009-14 Average Annual Demand



## High Demand Occupations

The work group recommends:

- Washington sustain and enhance its investment in the expansion of high demand programs and the pipeline of interested and prepared students.
- New degree production capacity should be focused on high demand occupations. New investment is also needed to improve the pipeline of students prepared to enter high demand programs.
- Expansion of early childhood education and math and science teacher programs are strategic concerns.



## Improving Analysis Capacity

State agencies and higher education institutions must make informed resource decisions based on an improved capacity to analyze labor market information and employer demand.

This requires:

- We use the inter-agency “Joint Report,” *A Skilled and Educated Workforce*, to regularly analyze employer demand, update goals and assess results.
- We augment the “Joint Report” process by establishing a technical advisory committee to advise on methodology and data sources, and consult with employers to validate results.
- Agencies develop plans on how to incorporate the analysis results into program plans and accountability systems. Agencies and institutions should use the results to guide resource allocation decisions.

## Conclusions

- As a state, we are facing an enormous challenge, and the potential economic and social consequences are very high.
- Our economic success has led us to rely heavily on our ability to attract talent to the state.
- Talent is and will continue to be the preeminent defining characteristic of an innovative, high wage economy.
- Competition for talent will continue to grow. In response, we must develop a strategy for educating all our citizens for the jobs we have today, and want to have in the future.